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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,939	08/04/2003	Rick McWilliams	31286-CIP1	1855
23589	7590	06/21/2005	EXAMINER	
HOVEY WILLIAMS LLP 2405 GRAND BLVD., SUITE 400 KANSAS CITY, MO 64108			NGUYEN, THONG Q	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 06/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/633,939	MCWILLIAMS, RICK	
	Examiner	Art Unit	
	Thong Q. Nguyen	2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 8-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12 and 13 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 8, 9, 11, 14 and 16 is/are rejected.
- 7) ☒ Claim(s) 3, 10 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/28/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The present Office action is made in response to the amendment filed on April 06, 2005. It is noted that in the amendment, applicant has canceled claims 5-7 and simultaneously added a new set of claims, i.e., claims 14-16, into the application. As a result, the pending claims now are claims 1-4 and 8-16.

Election/Restrictions

2. Applicant's election without traverse of Species (I) including claims 1-4 and 8-13 in the reply filed on April 06, 2005 is acknowledged.

It is noted that applicant has stated that the newly-added claims 14-16 direct to a drive mechanism having low friction material interposed between a drive gear and a mount, which feature is recited in new claim 14 and considered as a generic claim. The Examiner agrees such opinion. As a result, the claims 1-4 and 8-16 are examined in this Office action.

Drawings

3. The formal drawings contained six sheets of figures 1-7 were received on Jan. 13, 2004. The Examiner for the following reason(s) objects these drawings.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: The reference line "6-6" shown in figure 1 is not mentioned in the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in

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compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
6. The disclosure is objected to because of the following informalities: a) Page 1: line 9, the following phrase thereof "--, now U.S. Patent No. 6,603,602—should be added after "February 9, 2001"; b) page 8: lines 4-6, the phrase thereof "The design of the encoders 42, 44 is unique in that is allows for very high resolution and accurate position measurement using inexpensive parts and materials" contains at least one grammatical error; c) Page 10: line 31; "prompts" should be changed to --prompt--; d) page 14: line 25, "or103b" should be changed to --or 103b--. There are still some grammatical and idiomatic errors in the specification. Applicant should carefully proofread the specification. Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Everett (U.S. Patent No. 3,971,620).

Everett discloses a telescope assembly. In columns 8-9 and shown in figs. 3-4, the assembly comprises a mount having supporting structure for supporting a telescope and a driving mechanism having shaft, drive gear, drive motor and a clutch mechanism. The structure and the operation of the clutch mechanism in relation to the shaft, the gear and the motor as described in column 8, lines 20-66, provides that the clutch 226 allows the connection between the motor and the shaft and the gear when the mount and its supporting structure is moved by the operation of the motor 224 and the clutch 226 slips when the hand cranks 236 and 248 used for manually operation of the shaft 234.

9. Claims 1-2, 4, 8-9, 11, 14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Willis (U.S. Patent No. 3,604,546).

Willis discloses a mechanism for moving an object with respect to another object. The mechanism as described in columns 2-4 and shown in figs. 2-4 comprises a drive shaft (24), a drive gear (32) centered about the shaft, a drive motor (66) for driving the drive gear, and a clutch mechanism (38) for engaging the motor to

the shaft when the motor is used to move an object and for disengaging the motor and the shaft when a manual adjustment is performed. The clutch mechanism comprises a low friction material (44, 40) disposed between a drive gear (46) and a mount (36) wherein the low friction material (44) provides sufficient friction to engage the drive gear (46) with the mount when a movement is made by the operation of the motor and the connection between the low friction material (44) and the gear (46) is able to slip when a manual operation is made. The use of spring element (48) is for the purpose of providing compression on the drive gear to assist in proper operation of the clutch mechanism (38).

Regarding to the feature related to term "telescope" as recited in the preamble of the claims 1, 8 and 14, such feature is not given a patentable weight because all of the features appeared after the term "comprising" do not provide any features or structure of the so-called "telescope" recited in the preamble. See *In re Casey*, 152 USPQ 235 (CCPA 1967); *Kropa v. Robie*, 88 USPQ 478 (CCPA 1951).

Allowable Subject Matter

10. Claims 12-13 are allowed over the cited art.
11. Claims 3, 10, and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
12. The following is a statement of reasons for the indication of allowable subject matter:

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- a) The telescope system as recited in claim 12 is patentable with respect to the cited art, in particular, the U.S. Patent Nos. 4,142,139; 4,682,091; 3,971,620 and 3,604,546 by the limitations related to the use of two drive mechanism for moving the mount supporting a telescope in the azimuth axis and the altitude axis wherein each drive mechanism comprises a shaft, a drive gear centered about the shaft, a drive motor and a clutch mechanism for engaging the drive motor when moving the mount using the drive motor and for disengaging the drive motor when moving the mount manually to avoid the damage to the motor.
- b) The device as claimed in each of claims 3, 10 and 15 is patentable with respect to the cited art by the limitations related to the structure of the clutch mechanism. While the use of a clutch mechanism having low friction material is disclosed in the art as can be seen in the patent 3,604,546; however, the cited art does not disclose the arrangement of the low friction material between the drive gear and three raised contact points supporting the drive gear in a clutch mechanism for engaging the drive motor when moving the mount using the drive motor and for disengaging the drive motor when moving the mount manually to avoid the damage to the motor.

Conclusion

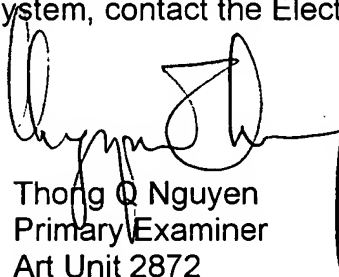
13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q. Nguyen whose telephone number is (571) 272-2316. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew A. Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thong Q. Nguyen
Primary Examiner
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